and is governed by the policies established for STS services (see §1215.101).

- (2) For free flyers and other payloads, command data must enter the system at the Goddard Space Flight Center (GSFC) if it is to be a standard service.
- (3) The use of other command data entry points [e.g., the NASA Ground Terminal (NGT) at White Sands, NM, or Johnson Space Center (JSC), for payloads using an independent direct link from TDRS to the user payload] is considered to be a mission unique service.
- (b) NASA is required to maintain the user satellite orbital elements to sufficient accuracy to permit the TDRS system to establish and maintain acquisition. This can be accomplished in two ways:
- (1) The user can provide the orbital elements in a NASA format to GSFC to meet TDRSS operational requirements.
- (2) The user shall insure that a sufficient quantity of tracking data is received at GSFC to permit the determination of the user satellite orbital elements. The charges for this service will be determined by using the onorbit service rates.

§ 1215.107 User data security and frequency authorizations.

- (a) User data security is not provided by the TDRSS. Responsibility for data security resides solely with the user. Users desiring data safeguards shall provide and operate, external to the TDRSS, the necessary equipment or systems to accomplish data security. Any such user provisions must be compatible with data flow through TDRSS and not interfere with other users.
- (b) All radio frequency authorizations associated with operations pursuant to this directive are the responsibility of the user. If appropriate, authority(ies) must be obtained from the Federal Communications Commission (FCC) for operations consistent with U.S. footnote 303 of the National Table of Frequency Allocations, FCC Rules and Regulations, at 47 CFR 2.106.

[56 FR 28049, June 19, 1991]

§ 1215.108 Defining user service requirements.

Potential users should become familiar with TDRSS capabilities and con-

straints, which are detailed in the TDRSS User's Guide (GSFC document, STDN No. 101.2), as early as possible. This action allows the user to evaluate the trade-offs available among various TDRSS services, spacecraft design, operations planning, and other significant mission parameters. When these user evaluations have been completed, and the user desires to use TDRSS, the user should initiate a request for TDRSS service.

(a) Initial requests for TDRSS service from non-U.S. Government should be addressed to NASA Headquarters, Code OX, Space Network Division, Washington, DC 20546. Upon review and preliminary acceptance of the service requirements by NASA Headquarters, the appropriate areas of GSFC will be assigned to the project to produce the detailed requirements, plans and documentation necessary for support of the mission. Changes to user requirements shall be made as far in advance as possible and shall be submitted in writing to both NASA Head-quarters, Code OX, Space Network Division, and GSFC, Code 501, Greenbelt, MD 20771.

(b) Acceptance of user requests for TDRSS service is the sole prerogative of NASA. Although TDRSS represents a significant increase to current support capabilities, service capacity is finite, and service will be provided in accordance with operational priorities established by NASA. Request for services within priority groups shall be negotiated with non-NASA users on a first come, first service basis for inclusion into the TDRSS mission model.

[48 FR 9845, Mar. 9, 1983, as amended at 56 FR 28049, June 19, 1991]

§ 1215.109 Scheduling user service.

- (a) User service shall be scheduled only by NASA. Scheduling refers to that activity occurring after the user has been accepted and placed in the TDRSS mission model as specified in §1215.108(b). See appendix C for a description of a typical user activity timeline.
- (b) Schedule conflict will be resolved in general by application of principles of priority to user service requirements. Services shall be provided either as normally scheduled service or

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as emergency/disruptive update service. Priorities will be different for emergency/disruptive updates than for normal services.

- (1) Normally scheduled service is service which is planned and ordered under normal operational conditions and is subject to schedule conflict resolution under normal service priorities. Priorities are established by the NASA Administrator or his/her designee. Requests for normally scheduled service must be received by the schedulers at the GSFC Network Control Center (NCC) no later than 45 minutes prior to requested support time.
- (2) Normal scheduling principles of priority are generally ordered as follows beginning with the highest priority:
- (i) Launch, reentry, landing of the STS Shuttle, or other NASA launches.
 - (ii) NASA payloads/spacecraft.
- (iii) Other payloads/spacecraft of interest to the United States.
- (iv) Other payloads/spacecraft launched by a NASA launch vehicle.
 - (v) Other payloads/spacecraft.
 - (vi) Support of other launches.
- (3) Exceptions to these priorities may be determined on a case-by-case basis with the NASA Administrator or his/her designee as the priorities stated in paragraph (b)(2) of this section are indicative of general rather than specific cases.
- (4) Emergency service conditions are those requiring rapid response to changing user service requirements. Emergency service may be instituted under the following conditions:
- (i) Circumstances which pose a threat to the security of the United States.
- (iii) Circumstances which threaten user mission loss.
- (iv) Other circumstances of such a nature which make it necessary to preempt normally scheduled services.
- (5) At times, emergency service requirements will override normal schedule priority. Under emergency service conditions, disruptions to schedule service will occur. As a consequence, users requiring emergency service shall be charged for emergency service at rate factors set forth in appendix B.

- (6) Disruptive updates are scheduled updates which, by virtue of priorities, cause previously scheduled user services to be rescheduled or deleted or are requested by the user less than 45 minutes prior to the scheduled support period.
- (i) Disruptive updates will be charged at the same rates as emergency service. User initiated schedule requests which are received less than 45 minutes prior to the requested schedule support time will be considered a disruptive update.
- (ii) User initiated schedule requests which are received more than 45 minutes and less than 12 hours prior to the scheduled support period will be acted upon as a routine input provided other users are unaffected. If other users are affected, the scheduling input will be considered a disruptive update and the appropriate charge factor will be applied.
- (iii) The Network Control Center (NCC) at GSFC reserves the sole right to schedule, reschedule or cancel TDRSS service. Schedule changes brought about through no fault of the user are not charged the factor for a disruptive update.
- (7) While the priority listing remains the general guide for establishing support availability, the NASA schedulers will exercise judgment and endeavor to see that lower priority users are not excluded from a substantial portion of their contracted-for service due to the requirements of higher priority users.
- (8) When a user contracts for TDRSS service for an "operational satellite" which interfaces with a significant number of national and world-wide users on a regularly scheduled basis as opposed to a "research and development satellite," NASA will place special emphasis on the operational requirement when planning schedules. This should reduce the probability of losing perishable operational data such as meteorological, climate, or earth resources information.
- (c) General user service requirements, which will be used for preliminary planning and mission modeling, should include as a minimum, the following:
 - (1) Date of service initiation.

- (2) Expected date of service termination.
- (3) The type of TDRSS services desired [e.g., multiple access, tracking, etc.].
- (4) The frequency and duration of each service, including orbital position or time constraints on service delivery from a given spacecraft where appropriate.
- (5) Orbital or trajectory parameters and tracking data requirements.
- (6) Spacecraft events affecting tracking, telemetry or command requirements.
- (7) Signal parameters and data rates by type of service, type and location of antennas and other related information dealing with user tracking, command, and data systems.
- (8) Special test requirements, compatibility testing, data flows, simulations, etc.
- (9) Identification of type and quantity of user information necessary for control functions, location of user control facility, and identification of communications requirements.
- (10) Identification of ground communications requirements and interface points, including the level of support to be requested from NASCOM.
- (d) To provide for effective planning, general service requirements should be provided at least 3 years before initiation of service. With these data NASA will determine whether the requested services can be provided.
- (e) Detailed requirements for user services must be provided 18 months before the initiation of service. These data will be the basis for the technical definition of the Interface Control Document (ICD). If requirements are received late, necessitating extraordinary NASA activities [e.g., overtime, special printing of documents], such activities will be considered to be mission unique and their cost charged the user.

[48 FR 9845, Mar. 9, 1983, as amended at 56 FR 28049, June 19, 1991]

§ 1215.110 User cancellation of all services.

The user has the right to terminate its service contract with NASA at any time. A user who exercises this right after contracting for service shall pay

the charge agreed upon for services previously rendered, and the cost incurred by the Government for support of pre-launch activities, services, and mission documentation not included in that charge. The user will remain responsible for the charges for any services actually provided.

§ 1215.111 User postponement of service.

The user may postpone the initiation of contracted service (e.g., user launch date) by delivery of written notification to NASA Headquarters, Code OX. Any delay in the contracted start of service date may affect the quantity of service to be provided due to commitments to other support requirements. Therefore, the validity of previous estimates of predicted support availability may no longer be applicable.

[56 FR 28049, June 19, 1991]

\$1215.112 User/NASA contractual arrangement.

- (a) The NASA Administrator reserves the right to waive any portion of the reimbursement due to NASA under the provisions of the reimbursement policy.
- (b) When NASA has determined that a potential user has not made sufficient progress toward concluding a contractual arrangement for service, after being placed in a mission model, NASA shall have the unilateral right to remove that user from the mission
- (c) NASA shall have the right to determine unilaterally that the potential user has failed to make progress toward concluding a contractual arrangement.

§1215.113 User charges.

- (a) The user shall reimburse NASA the sum of the charges for standard and mission-unique services. Charges will be based on the service rates applicable for the calendar year.
- (b) For standard services the user shall be charged only for services rendered, except that if a total cancellation of service occurs, the users shall be charged in accordance with the provisions of §1215.110.
- (1) Standard services which are scheduled, and then cancelled by the